select one of the operating modes for the NFC reader circuit based at least in part on the change in the magnetic field detected by the magnetometer.

5. The portable electronic device of claim **1** wherein the control circuitry is further configured to receive NFC tag data from the NFC reader circuit and to modify a behavior of the portable electronic device based on the received NFC tag data.

6. The portable electronic device of claim **1** wherein the NFC coil is positioned in a gap between the inductive coil and the annular magnetic alignment component.

7. The portable electronic device of claim **1** wherein the annular magnetic alignment component includes a plurality of sectors, each sector having a magnetic orientation with a radial component.

8. The portable electronic device of claim **7** wherein the control circuitry is further configured to trigger operation of the NFC reader circuit in the event that the change in the magnetic field corresponds to an expected change associated with an accessory device having a second magnetic alignment component becoming aligned with the portable electronic device, wherein the second magnetic alignment component is a second annular magnetic alignment component having a quad-pole magnetic configuration that is complementary to the annular magnetic alignment component of the portable electronic device.

9. A portable electronic device comprising:

a housing having an interface surface;

an annular magnetic alignment component disposed within the housing;

a near-field communication (NFC) coil disposed within the housing and coaxial with the annular magnetic alignment component, the NFC coil coupled to an NFC reader circuit and configured to wirelessly exchange signals with another device through the interface surface;

a magnetometer disposed near the interface surface and outboard of the annular magnetic alignment component; and

control circuitry coupled to the magnetometer and configured to trigger operation of the NFC reader circuit based at least in part on a change in a magnetic field detected by the magnetometer.

10. The portable electronic device of claim **9** wherein the magnetometer is a three-axis magnetometer and the change in the magnetic field includes a change in either or both of a magnitude or a direction of the magnetic field.

11. The portable electronic device of claim **9** wherein the control circuitry is further configured to trigger operation of the NFC reader circuit in the event that the change in the magnetic field corresponds to an expected change associated with an accessory device having a second magnetic alignment component complementary to the annular magnetic alignment component of the portable electronic device becoming aligned with the portable electronic device.

12. The portable electronic device of claim **11** wherein the NFC reader circuit is operable in a plurality of operating modes associated with different types of accessory devices and wherein the control circuitry is further configured to select one of the operating modes for the NFC reader circuit based at least in part on the change in a magnetic field detected by the magnetometer.

13. The portable electronic device of claim **9** wherein the control circuitry is further configured to receive NFC tag data from the NFC reader circuit and to modify a behavior of the portable electronic device based on the received NFC tag data.

14. The portable electronic device of claim **9** wherein the annular magnetic alignment component includes a plurality of sectors, each sector having a magnetic orientation with a radial component.

15. The portable electronic device of claim **9** wherein the control circuitry is further configured to trigger operation of the NFC reader circuit in the event that the change in the magnetic field corresponds to an expected change associated with an accessory device having a second magnetic alignment component becoming aligned with the portable electronic device, wherein the second magnetic alignment component is a second annular magnetic alignment component having a quad-pole magnetic configuration that is complementary to the annular magnetic alignment component of the portable electronic device.

16. A method of identifying an accessory, the method comprising:

operating, by a portable electronic device having a first annular magnetic alignment component, a magnetometer to monitor a magnetic field near the first annular magnetic alignment component;

detecting, by the portable electronic device, a change in the magnetic field indicative that an accessory having a second annular magnetic alignment component complementary to the first annular magnetic alignment component has come into proximity with the portable electronic device; and

in response to detecting the change in the magnetic field, operating, by the portable electronic device, an NFC reader circuit that includes an NFC coil coaxial with the first annular magnetic alignment component to read an NFC tag of the accessory.

17. The method of claim **16** wherein the change in the magnetic field includes a change in either or both of a magnitude or a direction of the magnetic field.

18. The method of claim **16** wherein the NFC reader circuit is operable in a plurality of operating modes associated with different types of accessory devices and wherein the method further comprises selecting one of the operating modes for the NFC reader circuit based at least in part on the change in a magnetic field detected by the magnetometer.

19. The method of claim **16** further comprising:

modifying a behavior of the portable electronic device based on identification data read from the NFC tag of the accessory.

20. The method of claim **19** wherein modifying a behavior of the portable electronic device includes changing an element displayed on a display of the portable electronic device.

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